

BETTER NOURISHED INFANTS AND PRE-SCHOOL CHILDREN

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"No nation can conquer childhood malnutrition if it waits until children are of school age to supplement the diets of those whose families are unable to provide them with enough of the right kinds of food." It was to find ways and means to solve this problem, explained Miss Heseltine, that Operation Niños appointed a committee of pediatricians, nutritionists and child welfare workers.

As a member of that committee with twenty-five years of professional experience, a good part of it in connection with Latin American child feeding problems, Miss Heseltine expressed optimism in getting results through sound programs and the coordinated efforts of professional agencies. She said she had heartening reports of child feeding project and, citing one example, she referred to the progress which had been made in Bolivia which started through the dedicated personal efforts of a woman office worker, Emiliana Cortes, about twenty years ago. She hoped this courageous woman still lived to see how much has been built on the foundation she laid.

Miss Heseltine stated that child feeding programs usually started as school lunches in large cities, and frequently the object was to appease hunger with a snack rather than to improve the quality of the diet. Today, the availability of nourishing foods from regions of agricultural abundance coupled with improved transportation mean that more and better food is getting to deprived children in isolated areas. While the good work of providing more school children with better food should continue, a beginning is being made to take up the difficult task of meeting the nutritional needs of children too young to go to school.

Studies in many parts of the world have shown that the most poorly fed member of the family is the child between the age of weaning and five or six years. Hence the urgent need

to extend feeding programs to children below school age. Generally, the pre-school child is too old to be properly cared for and too young to shift for himself. Consequently, in a home where there is not plenty for everyone he is likely to have a poor diet.

Miss Heseltine was supported by Dr. Cravioto and other seminar experts in the opinion that the consequences of a poor diet in the early years of life are serious. Said Miss Heseltine, "The young child who has to subsist on an inadequate diet for some time is almost sure to be stunted in his growth." His ability to combat intestinal or respiratory infections is impaired, and unless he receives prompt medical attention he may die. She said it was a fact that a large proportion of the deaths of pre-school children in low-income families of Latin America are due directly or indirectly to malnutrition. In discussions which followed, other Seminar participants noted that often malnutrition not only caused irreparable physical harm but mental retardation which might never be overcome in the lifetime of the victim.

Recovery of the undernourished child depends upon the severity and duration of malnutrition and the age of the sufferer but is promptly diagnosed and properly treated recovery can be dramatic. But the improvement will be permanent only if the child continues to receive an adequate diet at home. Mexican studies showed that permanent mental impairment might result from malnutrition during the first six months of life.

This focused attention on the importance of breast feeding and infant nutrition during the earliest formative period of child development. Said Miss Heseltine: "The surest way of protecting infants from the severe malnutrition that may leave life-long scars is to provide them with breast milk." She pointed out that one of

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THE MOBILE DEMONSTRATION UNIT

The Mobile Demonstration Unit was planned as a part of the program of Operation Niños which is placing increasing emphasis this year on nutrition education and on better utilization of foods. It will be used in the remote areas of Latin American countries to teach mothers and school teachers the "why" and the "how" of nutrition and to demonstrate how to use U.S. Food for Peace commodities in combination with local foods to provide balanced diets.

The first unit, donated by the American Freedom from Hunger Foundation, was christened by Mrs. Lyndon B. Johnson in Washington, D. C. and it arrived at Mexico City on July 24 while the Seminar was in session.

The Seminar representatives visited the unit at the American Embassy where they were invited in small groups to inspect its facilities and to offer their comments. Following the visit, the groups retired separately to conference rooms

where they discussed the unit and prepared a list of suggestions for improving the design and efficiency of the unit.

The next day the unit put on its first actual demonstration at Texcoco, a suburban community in the outskirts of Mexico City. Miss Fresia Cabello of Dairy Society International of Chile put on the food demonstration for a sizeable group of mothers (and children) who watched with interest while standing in the rain.

After short stopover in Mexico City, the unit continued on through Central and South America to Peru, giving demonstrations en route. At the capital cities visited, appropriate inspection programs were arranged by the USAID Missions in cooperation with the American Embassies, and the national governments. Upon its arrival at Lima, Peru, the pilot demonstration unit was turned over to the Peruvian Government for use in its national Operation Niños program.



"The Operation Niños food trucks... are more than harbingers of good health and friendship. They constitute the practical application of love and attention for the children of today and the leaders of tomorrow".

Mrs. Lyndon B. Johnson

"...to teach mothers not only the 'how' of food preparation but the 'why' of nutrition".

Dr. Martin J. Forman



For children living under primitive conditions Miss Heseltine recommended the postponement of serving vegetable fruits until the baby can eat them in mashed form. Local fruits and vegetables should always be included in any teaching program for the feeding of young children. They contain vitamins and minerals which supplement the Food for Peace foods.

No later than the end of the second year children may have their share of all Food for Peace foods which the family receives. However, it is important that families understand that these are supplementary foods and are not a replacement for the customary home foods.

The speaker said the most immediate problem is now to extend the distribution of Food for Peace commodities to mothers and young children and how to teach mothers to use these foods to promote good nutrition. She suggested that the quickest and most effective way is through the resources already available in the community and she mentioned the health centers to which mothers come for their own health supervision or for the care of their babies and young children; centers which are set up for combining nutrition education with other health services, and any community facility where pre-school children are cared for during the day while their mothers work. All of these have possibilities said Miss Heseltine and she welcomed additional suggestions from the delegates.

Miss Heseltine called attention to a paper en-

titled "Nutrition of the Pre-School Child: A Consideration of New Approach" by Dr. Marcel Autret, Director of the Nutrition Division of the Food and Agriculture Organization of the United Nations. Mimeograph copies of the paper were made available to the Seminar delegates.

As to the best method of teaching mothers about nutrition, Miss Heseltine recommended the demonstration technique on the proven theory that "seeing is believing". She called attention to the special booklet on pre-natal and infant feeding prepared by "Operation Niños" which was being distributed at the Seminar to help workers in health and food distribution centers. The booklet presents some elementary information on the nutritional needs of mothers and young children, and on the contributions that Food for Peace commodities provide to diets.

Miss Heseltine concluded by saying that if the delegates attack the problem of feeding programs for infants and pre-school children with the same vigor demonstrated in the school feeding program, those who could equal her own 25 years of experience with child nutrition should see some results of their efforts before they retire.

Following this presentation by Miss Heseltine, Dr. Rene Cravioto of INPI stressed the importance of adequate nutrition in the early formative months and years of a child's life and he expressed concurrence with the opinions and recommendations of the preceding speaker. The session closed after an animated period of discussion between the delegates and the speakers.

"The Pre-school child may be the most poorly fed member of the family"

Miss Marjorie M. Heseltine



the major aims of child health workers is to encourage and help all mothers who can nurse their babies to do so.

Government surveys in seven Latin American countries showed that the periods of breast feeding by mothers ranged from three to 14 months and in some instances in Northeast from 0 to 6 months (although 3 to 5 months is common in this area). A baby can thrive on a shift from breast feeding quite early if an ample supply of safe cow's milk is available and there are proper facilities for preparing and storing milk formulas. But low-income families are unlikely to have these facilities. When the only transition food for the small baby is cereal or low protein starchy roots, breast feeding should be continued at least through the first year, and preferably longer.

For various reasons the encouragement of breast feeding is not an easy task, noted Miss Heseltine. The trend of working mothers to large cities interferes with normal nursing periods. Others consider breast milk inferior to commercial milk and other infant foods. Many mothers think their milk does not satisfy their baby. Health workers can help encourage breast feeding by seeing to it that women actually receive proper supplementary foods, and to help them understand the reasons they are essential. After the baby is six months old breast milk only is not sufficient to meet his increasing needs for development. Although the quantity of breast milk may decrease, the quality remains more or less uniform and even a small amount is a very measure can do as much for the nutrition of measure can do as much for the nutrition of Latin American children as for mothers to nurse them as long as possible. Where breast feeding is impossible this is a medical problem and it is not the responsibility of those engaged in mass feeding programs.

Foods distributed under the Food for Peace program are valuable nutritional supplements, stated Miss Heseltine, but they are not adequate substitutes for breast feeding. Persons reconstituting non-fat dry milk for feeding young children need to know that vitamin A must be added to the diet to meet full nutritive requirements and to avoid a possibility of blindness caused by its absence. It is tragic to have children deprived of the proteins and calcium of non-fat dry milk because it was improperly substituted for maternal or bovine whole milk.

Transitional foods for infants of poor families, frequently living under primitive conditions, present special problems not generally prevalent among more affluent families. For example, when there is too little food to go around any unnecessary item for the baby means that much less for the other children. Furthermore, in humble homes sanitation is difficult, and food may be prepared and stored in such a way as to carry disease. Only those items which are essential to the infant's diet and which can be safely prepared should be used. Such precautions are more important in the tropics where temperatures promote rapid bacterial growth. Miss Heseltine implied that these were important reasons for depending upon maternal milk for the infant, especially the first six months.

Specific foods to be added to the baby's diet will vary from region to region according to what is obtainable and considered acceptable by mothers. In any case a food should meet the following criteria: (1) it should supply the nutritive requirements of the baby; (2) it should be in a form easy to swallow and digest; (3) it should be free from organisms that might cause disease.

Miss Heseltine explained how the Food for Peace commodities meet those criteria. She said non-fat dry milk is an excellent source of proteins as a supplement to breast milk. But because once it is reconstituted as a liquid it becomes a potential disease carrier and for this reason the Sub-committee on Infant and Pre-School Feeding of Operation Nines strongly endorses the recommendation of Dr. Derew Jelliffe, the eminent tropical pediatrician. He advises that non-fat dry milk should be fed to the baby first as a dry powder sprinkled over his cereal gruel. Later, when the baby is old enough to drink from a cup, reconstituted non-fat milk may be used which has been prepared with cooled water that has been boiled. Only the amount to be used immediately should be prepared to prevent organisms having time to incubate. An excellent alternative to whole milk for infants is a drink made from non-fat dry milk with water and butter oil providing it is mixed by a reliable person.

Corn meal, rolled wheat and bulgur are well suited for infant feeding, especially if the porridge is sufficiently diluted and cooked to make it very soft. Extra proteins may be provided by the addition of non-fat dry milk powder to the porridge as noted previously.